STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:	**)**	**Docket No. 01-AFC-19**
	)	
Application for Certification	**)**	
of the Sacramento Municipal	**)**	
Utility District's Cosumnes	**)**	
Power Plant Project	**)**	
	)	

SACRAMENTO MUNICIPAL UTILITY DISTRICT'S OPENING BRIEF

FOR GROUP 1 HEARINGS

Arlen S. Orchard
Steven M. Cohn
Lourdes Jimenez-Price
SACRAMENTO MUNICIPAL
UTILITY DISTRICT
P.O. Box 15830, M.S. B406
Sacramento, CA 95852-1830
Phone: 916-732-6121
FAX: 916-732-6581

Jane E. Luckhardt
DOWNEY BRAND, LLP
555 Capitol Mall, 10th Floor
Sacramento, CA 95814-4686
Phone: 916-441-0131
FAX: 916-441-4021

Attorneys for Sacramento Municipal
Utility District

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I. INTRODUCTION

The Sacramento Municipal Utility District ("SMUD") hereby submits this Opening Brief supporting the licensing of the Cosumnes Power Plant Project ("CPP" or "Project") Application for Certification ("AFC").[1]

SMUD is a municipal utility district, organized pursuant to the California Municipal Utility District Act (Division 6 of the California Public Utilities Code, sections 11501, et. seq.), serving over 1.3 million people in Sacramento County and a portion of Placer County, California. For more than 50 years, SMUD has provided its customer-owners with a reliable source of electricity at competitive rates that are consistently lower than investor-owned utilities in the state. Currently, SMUD produces about half of its own electricity from hydroelectric, solar, photovoltaic, wind, and natural gas energy sources. The other half of SMUD's power is purchased on the wholesale market.

Sacramento County is one of the fastest growing regions in the country. Its population is increasing by nearly three percent each year, and with that growth the need for a major baseload power source becomes ever more acute. The Project will enable SMUD to produce more of its own power and, therefore, have more control over maintaining reliability and stabilizing electric rates.

Just as important for northern California in general, there is a regional need for local voltage support within the SMUD service area. (DR Set 1E, p. 2.) Simply stated, a local power plant acts to stabilize voltage in the transmission lines serving a regional or local service area.

[1] In accordance with discussions among the parties at the conclusion of the Group 2 Evidentiary Hearing on May 12, 2003, the Committee set forth a schedule for the preparation and filing of briefs detailed in the Briefing Order filed on May 16, 2003. Pursuant to the Committee's direction, this Opening Brief covers Air Quality/Visible Plumes, Compliance, Cultural Resources, Efficiency, Facility Design, Geology, Hazardous Materials, Land Use, Mineral Resources, Noise and Vibration, Paleontology, Public Health, Reliability, Socioeconomics, Soils, Traffic and Transportation, Transmission Line Safety, Transmission Line Engineering, Visual Resources, Waste Management, and Water for the CPP AFC. SMUD all remaining issues in its brief to be filed June 13, 2003.

(Id.) Without the local benefit of a baseload power plant to meet growing regional demand, system reliability can be compromised. (Id.) Fluctuations in voltage could damage customer equipment and cause service outages. (Id.) The existing switchyard and transmission lines emanating from the Rancho Seco Nuclear Generating Station ("Rancho Seco Plant") support established load centers and substations that are integral to the region and SMUD's service area. (Id.) It is anticipated that existing transmission lines could serve the area well into the future with the proposed Project's added voltage support. (Id.) Conversely, the failure to site a baseload power plant in the region to meet increased customer demands would require clearing new corridors and building new transmission lines. (Id.)

When SMUD first anticipated a need for additional firm power generation, it evaluated a variety of sites with respect to infrastructure, ability to serve SMUD, and the potential for conflicts with other land uses. (AFC, p. 9-2.) This analysis led SMUD to consider reusing 30 acres of the land and some existing facilities associated with SMUD's 900-MW Rancho Seco Plant, located 25 miles southeast of the City of Sacramento. (AFC p. 1-1.) SMUD continues to own the Rancho Seco Plant site, which was closed by a vote of SMUD's ratepayers in 1989. SMUD's Rancho Seco Plant site includes not only the shut down nuclear plant, but also the surrounding 2,480 acres of land, the existing 1,800-MW transmission system, and access to the existing Folsom-South Canal ("FSC") water conveyance system and associated water rights.

In short, SMUD already controls a large amount of land in and around the former nuclear plant site that is still suitable to develop for its original purpose, i.e., electrical generation. (Id.) The particular location of the CPP site was selected for the following reasons:

- The site is close to the existing transmission substation at the Rancho Seco Plant, with access to PG&E, and through PG&E, the ISO electrical markets. The

proposed project site will allow power delivery without constructing significant new transmission lines, thereby reducing potential impacts on the environment.

- Sufficient land (in excess of 30 acres plus a construction laydown area) is available.
- SMUD has a contract for and has paid for, an ample water supply that is already delivered to the site by the Folsom-South Canal. Water quality is excellent, allowing a high level of cycling.
- Water is already delivered to the site by the existing FSC system, thereby eliminating the environmental impacts of constructing additional water supply infrastructure.
- The site is close to present and future gas supplies for future reliability.
- Development of the site would not significantly impact environmental resources.
- The site is located in a rural area with comparatively few residents nearby.
- The project uses would be consistent with neighboring utility uses, and is consistent with the originally intended (and zoned) use of the site, power generation. (Id.)

In addition to the favorable site locale, the CPP's operation will be highly efficient. As a modern "combined-cycle" plant, the CPP will use two power cycles to extract the highest efficiency possible from the natural gas fuel it uses. (DR, Set 1E, p. 1) The ZLD system proposed by SMUD also ensures that the Project will cycle the FSC water 12 to 15 times, ensuring efficient use of fresh water. The Project will use reliable and effective air emission controls to minimize air pollution, and will more than offset those emissions by reducing emissions at other sources nearby.

II. UNCONTESTED ISSUES

SMUD and Staff are in full agreement that the Project should be approved and are further in agreement on all of the conditions of certification for the Project, except for a few of the Air Quality conditions, which are briefed in Part III below.

Several intervenors chose to contest a number of other technical areas. However, the following topics were uncontested by any party in this proceeding: Cultural Resources; Public Health; Socioeconomics; Transmission Line Safety and Nuisance; Waste Management; all Engineering issues, including Facility Design, Geology, Mineral Resources, and Paleontology, Power Plant Efficiency, Power Plant Reliability, and Transmission Line Engineering; and General Conditions (other than Compliance). The testimony of SMUD and the Staff is uncontroverted as to these topics. SMUD moved for admission of the uncontested written testimony and resumes into the record at the Friday, March 14, 2003, Evidentiary Hearing. (3/14 RT 253.) Without objection, the Committee admitted the testimony and resumes into the record. (3/14 RT 254.) Similarly, the Committee admitted Staff's testimony and resumes on these topics without objection on the same date. (3/14 RT 258, 262.)

Based on the evidence of record, SMUD urges the Committee: (1) to incorporate the above-referenced topics and the joint Conditions of Certification as a part of its Proposed Decision; and (2) to find that with the implementation of the Conditions of Certification, the Project complies with all applicable local, regional, state, and federal laws, ordinances, regulations and standards ("LORS") in these topic areas, and that all potentially adverse impacts will be mitigated to a level of insignificance.

III. CONTESTED ISSUES

A. Air Quality.

1. The Cosumnes Power Plant Project Will Comply with the Applicable Federal, State, and Local Laws, Ordinances, Regulations, and Standards, and with Mitigation, Does Not Result in Any Significant Air Quality Impacts.

SMUD selected and paid a premium for the lowest emitting combustion turbine available, the General Electric Frame 7FA. This purchase is consistent with SMUD's overall policy to reduce the environmental impacts of its power generation portfolio. SMUD continued this policy in obtaining offsets for the facility that satisfy the requirements of the Sacramento Metropolitan Air Quality Management District ("SMAQMD"), the United States Environmental Protection Agency ("USEPA"), and the Staff.

For the reasons set forth below and based on the testimony of Air Quality expert Mr. Gary Rubenstein, the evidentiary record demonstrates that construction and operation of CPP will protect public health and safety from an air quality standpoint, and will meet all of the air quality LORS under all operating conditions, under all meteorological conditions and at all locations, based on conservative assumptions regarding background or existing air quality, operating levels, emission rates and meteorology. (SMUD Group 1 Testimony, Air Quality, Gary Rubenstein, p. 11; 3/13 RT 30.) In addition, the evidence clearly shows that there are no significant, unmitigated air quality impacts associated with CPP if the conditions proposed by SMUD are adopted. (See Appendix A for a detailed discussion of CPP's impacts to local and regional air quality.)

2. SMAQMD Agrees with SMUD that a 10 ppm Ammonia Slip Limit is Appropriate.

The Staff has proposed Condition of Certification AQ-SC7 to require a 5 ppm ammonia slip limit (CEC Staff Supplemental Air Quality Testimony, March 12, 2003, p. 11); the Final Determination of Compliance (FDOC) issued by the SMAQMD established a 10 ppm ammonia slip limit (FDOC, p. 27, Condition 23). The SMAQMD has reviewed this issue, and has concluded that a 10 ppm ammonia slip limit is appropriate for this project. (FDOC, p. 27; 3/13 RT 20.) It is undisputed that there is no Best Available Control Technology (BACT) requirement for ammonia emissions. (5/12 RT 308.) Both SMUD and the SMAQMD have provided testimony indicating that further control of ammonia emissions, below the 10 ppm level required by the SMAQMD, will not result in any health benefits. (SMUD Group 1 Testimony, Air Quality, p. 16; 3/13 RT 21; 3/13 RT 49-50.) The Staff has not disagreed with any analyses performed by SMUD and the SMAQMD; rather, the Staff simply ignores those analyses that are not consistent with their own conclusions.

The Staff's conclusions regarding the need for a 5 ppm ammonia slip limit are completely at odds with the Staff's position in a number of other cases, including the High Desert (97-AFC-1), Sutter (97-AFC-2), Los Medanos (98-AFC-1), La Paloma (98-AFC-2), Delta (98-AFC-3), Sunrise II (98-AFC-4C), Elk Hills (99-AFC-1), Otay Mesa (99-AFC-5), Pastoria (99-AFC-7), Blythe (99-AFC-8), Midways Sunset (99-AFC-9),Valero (01-AFC-5), Los Esteros (01-AFC-12), MID Woodland II (01-SPPE-1), and Tracy Peaker (01-AFC-16) Projects. (IDR Set 14, Air Quality Exhibits, Summary of Ammonia Slip Levels in Recent CEC Siting Cases, Presented during the oral testimony of Gary Rubenstein on March 13, 2003.) These projects cover a broad range in time, a broad range in size and combustion technology, and a range of attainment

designations. The Staff has presented no evidence in the CPP proceedings to support a different conclusion in this case, or to second-guess the judgment of the air pollution control agencies with principal responsibility for air quality in this region.

i. Neither CARB nor USEPA Challenged SMAQMD's Determination to Require a 10 ppm Ammonia Slip.

During the March 13 hearings, evidence was presented that an analysis by the California Air Resources Board ("CARB") contained in the FDOC concluded that the Sacramento area is ammonia-rich. (3/13 RT 49-50; FDOC, Appendix B-2, p. 13, sequential page 361.) The SMAQMD staff reiterated this conclusion. (3/13 RT 21.) This conclusion means that increases or decreases in ammonia emissions in the Sacramento area are not likely to result in any changes to ambient PM10 levels. (3/13 RT 50, 64.) This assessment is a case-by-case determination, based on local air quality data and meteorology, and the conclusion does not hold true for all parts of California. The correctness of the conclusion for the Sacramento region has not been challenged by any air pollution control agency. In fact, the Preliminary Determination of Compliance (PDOC) for the CPP was circulated to CARB, USEPA, and staff, as well as to the public. Only two comment letters were received by the SMAQMD – from the USEPA and from SMUD. Neither of these two comment letters questioned the 10 ppm ammonia slip level proposed by the SMAQMD. (FDOC, pages following Appendix C.)

ii. The Staff has Taken an Inconsistent Stance on Ammonia Slip.

In a recent case, the Revised Presiding Member's Proposed Decision ("Revised PMPD") for the East Altamont Energy Center ("EAEC") rejected the Staff's arguments that a 5 ppm slip level should be required, and sustained the opinions of the Applicant, BAAQMD and San

Joaquin Valley Air Pollution Control District. (Revised PMPD, East Altamont Energy Center, 01-AFC-04, p. 150.) In that case, the Staff argued that a more stringent ammonia slip level of 5 ppm was necessary because those projects would affect PM10 air quality in the San Joaquin Valley Air Basin – which has PM10 levels in excess of federal (as well as state) air quality standards. In fact, the Staff's arguments in the EAEC case are nearly identical to those presented in this preceding. (FSA, pp. 4.1-15 to 4.1-16; Revised PMPD, EAEC, p. 115.) However, unable to use the same supporting rationale in this case – the project area for CPP, and indeed the SMAQMD, has not had any exceedances of the federal PM10 standard for over nine years – the Staff creates a different rationale to support their position –violations of the state PM10 standard and alleged violations of the new federal PM2.5 standard. (SMUD Group 1 Testimony, Air Quality, p. 18; FSA, pp. 4.1-15 to 4.1-16.) Furthermore, Staff admitted that the conversion rate of ammonia to PM10 or PM2.5 is "very variable and very speculative". (5/12 RT 345-346.) If even the proponent of the analysis admits the conversion rate is speculative, no mitigation should be required.

In the Revised PMPD for EAEC, the committee in that proceeding expressly rejected attempts by the Staff to require additional mitigation based on the new federal PM2.5 standard. (EAEC Revised PMPD, p. 50.) SMUD believes based on the above discussion that this Committee should take similar action on CPP.

In the CPP proceeding, the Staff takes the position that even if the Sacramento region is ammonia rich, further control of ammonia slip would be beneficial. (3/13 RT 146-147.) However, this position is diametrically opposed to that taken by the Staff in the San Joaquin Valley Energy Center ("SJVEC") proceeding in which they stated the following:

> "The ammonia emissions from the project would come from the SCR system, which controls the NOx emissions, as unreacted ammonia, or "ammonia slip," that remains in

> the exhaust after passing through the SCR catalyst system. The San Joaquin Valley, as a result of agricultural ammonia emissions, is ammonia rich, meaning that ammonia is not the limiting reactant for secondary PM10 formation. This means higher ammonia emissions will not necessarily result in additional secondary PM10 formation; however, reducing NOx emissions will almost certainly reduce secondary PM10 formation. While the ammonia emissions are recognized as a necessary by-product of the NOx control system, staff still encourages the Applicant to control their ammonia slip emissions to the lowest possible extent, while maintaining the guaranteed NOx emission limit." (San Joaquin Valley Energy Center, 01-AFC-22, FSA, p. 4.1-43.)

The Staff recommended an ammonia slip limit of 10 ppm in the SJVEC case.

SMUD would suggest that the Staff is attempting to use a "one size fits all" approach to ammonia slip levels. However, the above example, combined with the "Summary of Ammonia Slip Levels in Recent CEC Siting Cases" distributed by Mr. Rubenstein at the March 13, 2003, hearing demonstrate that there is no logical pattern to the Staff's advocacy of a 5 ppm slip level. (The Staff's position in the SJVEC proceeding belies their claim that there is a trend of lower ammonia slip levels. See oral testimony of Mr. Layton 3/13 RT 148.) It is precisely this lack of rationality, which imparts a need for the Committee to defer to the SMAQMD's judgment on this issue.

Staff also attempts to rely on the CARB Guidance for Power Plant Siting and Best Available Control Technology, issued Sept. 1999, ("CARB Guidance") to support their effort to place a 5 ppm ammonia slip level on CPP. (FSA, p. 4.1-16.) The CARB Guidance has been in effect throughout most of the Commission proceedings of the last four years in which a 10 ppm ammonia slip level has been approved by the Commission with the support of the Staff. ("IDR, Set 14, Air Quality Exhibits, Summary of Ammonia Slip Levels in Recent CEC Siting Cases, presented during oral testimony of Mr. Rubenstein.) What Staff fails to mention is that CARB recommends the action taken by SMAQMD in this case, to minimize ammonia slip to a <u>health protective level</u> and <u>consider</u> establishing a level at or below 5 ppm. (CARB Guidance, p. 12;

emphasis added.) Both of these were considered by SMAQMD in setting the ammonia slip level. Staff further fails to note that the CARB Guidance contains a higher NOx emission limit than that required by SMAQMD for CPP. (CARB Guidance, p. 8.) In the case of CPP, SMAQMD has made the decision to focus on further NOx control -- to a 2.0 ppm level -- rather than focusing on reducing ammonia slip levels, which provide uncertain -- if any -- air quality and public health benefits. Therefore, SMAQMD followed the CARB Guidance, which is neither a directive for all basins and projects to set a level of 5 ppm nor a complete analysis of the current regulatory status where the lower NOx limits apply to projects such as CPP.

In this proceeding, the Staff has similarly failed to develop evidence demonstrating that there is a significant air quality impact related to ammonia slip that warrants further mitigation. In addition, the Staff has failed to provide the evidence that reducing ammonia slip levels from 10 ppm to 5 ppm would, in fact, provide additional air quality or public health benefits. Based on the above discussion, SMUD's evidence supports a similar conclusion for CPP to that reached in the Revised PMPD for EAEC on this issue, and the Staff's proposed condition AQ-SC7 should be rejected.

3. Project Impacts from CPP Are Not Atypical and Do Not Warrant Special Monitoring and Reporting Requirements.

In the FSA, the Staff proposed an additional Condition of Certification, AQ-SC8, which establishes significant, additional air quality monitoring and reporting requirements that go beyond those established by the SMAQMD. (FSA Supplemental Air Quality Testimony, pp. 11-12.) The Staff has not articulated any basis for establishing these additional requirements, except to suggest at a workshop that they are needed to help the Staff respond to requests from commissioners and others. No rationale was presented in either the FSA or in the Staff's

Supplemental Air Quality Testimony to support this condition. In fact the Staff characterized the goal of the SMAQMD as only reporting violations and by implication not interested in the Staff's stated concern that the Project is in compliance with the conditions. (3/13 RT 149.) This implication by Staff is clearly inconsistent with the standard practice of SMAQMD who monitors permits on no less than an annual basis and has both federal and state authority to permit and monitor compliance with those permit conditions. The Staff would simply be duplicating the efforts of another public agency in a time of fiscal difficulties. The Committee must establish a threshold for need before creating new monitoring and reporting requirements in a discipline that is well regulated by other agencies. The FDOC for CPP already contains 43 conditions established by the SMAQMD to regulate and monitor emissions from the project. Since the SMAQMD is the agency with principal responsibility for ensuring compliance with these conditions and SMUD believes quite diligent in pursuing its efforts in this regard, the Committee should defer to that agency in determining what information is necessary to fulfill that responsibility. Therefore, SMUD sees no justification or need for Condition of Certification AQ-SC8.

4. Agreement Has Been Reached Regarding Most Mitigation Conditions; the Committee Should Accept CPP's Proposed Conditions in the Remaining Areas.

The Staff has proposed a series of construction mitigation conditions for CPP that go well beyond those required by the Commission of other, similar projects, despite the fact that there is nothing unique with respect to CPP's construction impacts. Despite this fact, SMUD has worked diligently with the Staff in an attempt to reach agreement on as many of these conditions as possible. With the help of the Committee, at the March 13, 2003 hearing, agreements on some

additional conditions were reached. In discussions held with the Staff recently in the context of another project, yet further agreements were reached. The language included in the current revision of the proposed Conditions of Certification represents language that SMUD and the Staff have agreed to with respect to all conditions of certification, with a few exceptions. These exceptions are discussed further below.

i. AQ-SC3(n) Should Address Dust Control, Not Set a Random Wind Speed.

Condition AQ-SC3(n) – The Staff has proposed the following language for this condition:

> n) Any construction activities that can cause fugitive dust in excess of the visible emission limits specified in Condition AQ-SC4 shall cease when the wind exceeds 15 miles per hour.

There was extensive discussion of this condition at the March 6, 2003, workshop, and again at the March 13, 2003, hearing; however, in each case, the Staff has refused to revise its position. (During the hearing Staff also expressed two different opinions on the interpretation of AQ-SC4(n) from stopping construction when wind speeds exceed 15 miles per hour to stopping construction activities only if the activity causes a dust plume. See 3/13 RT 166 & 172. SMUD believes that the creation of dust should govern, not the wind speed.) SMUD's air quality testimony proposed to modify that language by changing the 15 mile per hour value to 25 miles per hour, to be consistent with similar requirements contained in the requirements of air pollution control districts. Staff rejected that change, despite being unable to articulate a basis for the 15-mile per hour requirement. The transcript of the March 13 hearing suggests that some resolution was achieved, but Staff has not confirmed the resolution. (3/13 RT 172-176.) In the interests of

moving this issue along, SMUD proposes the following alternate language to the Staff's condition:

n) Any construction activities that ~~can~~ cause fugitive dust in excess of the visible emission limits specified in Condition AQ-SC4 shall cease when the wind exceeds 15 miles per hour and one or more complaints have been made to the AQCMM and/or CPM regarding fugitive dust, until water, dust suppressant, or other measures have been applied to reduce dust to the limits set forth in AQ-SC4.

This change would make clear the linkage between the requirement to cease construction activities and exceedances of the visible dust emission limits specified in Condition of Certification AQ-SC4. It would also make clear that if SMUD is able to remain in compliance with the visible emission limits contained in AQ-SC4, dust-generating activities can continue even if wind speeds exceed 15 miles per hour. Requiring the cessation (or curtailment) of construction activities even if the dust limits of AQ-SC4 are met is not justified, as there has been no demonstration of a significant environmental impact under those conditions that warrants mitigation.

ii. AQ-SC3(p), (q) and (r) Should be Consistent with Previous Siting Cases and Current Law.

Condition of Certification AQ-SC3 parts (p), (q) and (r) – There was also extensive discussions of these conditions at the March 6 workshop and the March 13 hearing; yet again, there was no clear resolution of the issues. SMUD continues to propose the following revisions to these conditions to make them consistent with conditions imposed by the Commission in previous siting cases:

p) All ~~large~~ construction diesel engines shall comply with the following mitigation requirements, except as noted below:~~, which have a rating of 100 hp or more, shall meet, at a minimum, the 1996 ARB or EPA certified standards for offroad equipment.~~

~~q) All large construction diesel engines, which have a rating of 100 hp or more, shall be equipped with catalyzed diesel particulate filters (soot filters), unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types.~~

~~r) All diesel-fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site AQCMM that shows the engine meets the conditions **AQ-SC3**(p) and **AQ-SC3**(q) above.~~

Engine Size (BHP)	1996 CARB or EPA Certified Engine	Required Mitigation
< 100	NA	Ultra-low Sulfur Diesel
>= 100	Yes	Ultra-low Sulfur Diesel
>= 100	No	Ultra-low Sulfur Diesel, and Diesel Particulate Filter (DPF) if suitable as determined by the CMM

(i) If the construction equipment is intended to be on-site for ten (10) days or less, then only the use of ultra-low sulfur Diesel fuel shall be required.

(ii) The CPM may grant relief from the mitigation measures listed in this condition for a specific piece of equipment if the CMM can demonstrate that they have made a good faith effort to comply with the mitigation measures and that compliance is not possible.

(iii) The use of a DPF may be terminated immediately if one of the following conditions exists, provided that the CPM is informed within ten (10) working days of the termination:

a. The use of the DPF is excessively reducing normal availability of the construction equipment due to increased downtime for maintenance, and/or reduced power output due to an excessive increase in back pressure.

b. The DPF is causing or is reasonably expected to cause significant engine damage.

c. The DPF is causing or is reasonably expected to cause a significant risk to workers or the public.

d. Any other seriously detrimental cause which has approval of the CPM prior to the termination being implemented.

During testimony at the March 13 hearing, the Staff made clear its intention to avoid requiring SMUD to undertake actions that would be inconsistent with state or federal regulatory requirements. (3/13 RT 151.) Unfortunately, Staff is willing to write a condition containing requirements that violate existing laws and is offering an "opt-out" instead. (3/13 RT 151.)

SMUD would prefer that the written condition language clearly not violate current law. To underscore that point in the condition, if the Committee finds the above proposal unacceptable (even though it has been accepted in prior proceedings), SMUD is proposing the following alternative revisions to Conditions AQ-SC3 (p) and (q):

p) All large construction diesel engines, which have a rating of 100 hp or more, shall meet, at a minimum, the 1996 ARB or EPA certified standards for off-road equipment, unless certified by the on-site AQCMM that a certified engine is not available for a particular item of equipment.

q) All large construction diesel engines, which have a rating of 100 hp or more, shall be equipped with catalyzed diesel particulate filters (soot filters), unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types. For purposes of this condition, the use of such devices is "not practical" if, among other reasons:

i) there is no available soot filter that has been certified by either the California Air Resources Board or U.S. Environmental Protection Agency for the engine in question; or

ii) the construction equipment is intended to be on-site for ten (10) days or less.

The CPM may grant relief from this requirement if the AQCMM can demonstrate that they have made a good faith effort to comply with this requirement and that compliance is not possible.

The use of a soot filter may be terminated immediately if one of the following conditions exists, provided that the CPM is informed within ten (10) working days of the termination:

a. The use of the soot filter is excessively reducing normal availability of the construction equipment due to increased downtime for maintenance, and/or reduced power output due to an excessive increase in backpressure.

b. The soot filter is causing or is reasonably expected to cause significant engine damage.

c. The soot filter is causing or is reasonably expected to cause a significant risk to workers or the public.

d. Any other seriously detrimental cause which has the approval of the CPM prior to the termination being implemented.

If the above changes were accepted, SMUD would waive its objection to AQ-SC4 (r).

iii. SMAQMD Should Determine whether Monitoring Equipment Meets SMAQMD Regulations.

Condition of Certification AQ-32: There remains a disagreement between SMUD and the Staff regarding the verification provision for this condition. The Staff's version of this condition would require that SMUD obtain approval from both the SMAQMD and the CPM for three select items of monitoring equipment: a fuel flow meter, an exhaust flow measurement (which is actually a calculation based on the measured fuel flow and exhaust oxygen concentration), and a meter to measure the total dissolved solids in the cooling tower basin. The problem with this requirement is that the verification language clearly states that these meters must meet SMAQMD's monitoring requirements. If SMAQMD verifies that these meters satisfy the SMAQMD's monitoring requirements, then the only circumstances under which CPM approval would be meaningful is if the CPM were to attempt to establish requirements different from those imposed by the SMAQMD – a circumstance that is not allowed for in the Staff's proposed condition. Consequently, SMUD reiterates its objections to the Staff's proposed verification language, and proposes the following:

> At least sixty (60) days prior to ~~the start of ground~~ ~~disturbance~~ purchase of the continuous monitoring system, the project owner shall submit to the District ~~**and the CPM**~~, for approval, **and to the CPM, for review**, a copy of the manufacturer specifications for the continuous monitoring system, which demonstrates compliance with the ~~EPA performance specifications~~ District's monitoring requirements.

This language is presented as a redline mark-up to the language contained in the Staff Assessment; however, only the language that is in bold italics remains in dispute between SMUD and the Staff.

Staff believes that the above conditions are the only air quality conditions that remain in dispute between the Staff and SMUD. In addition, as noted above, SMUD is requesting that the

Committee reject in their entirety the Staff's proposed conditions related to ammonia slip (AQ-SC7) and additional monitoring and reporting requirements (AQ-SC8). It is SMUD's understanding that the Staff will be presenting, to the Committee, a final version of the agreed-upon conditions and a clear statement as to the conditions that remain in dispute. SMUD has reviewed a draft of the Staff's draft, and expects to agree with that representation, except to the extent that SMUD has proposed further compromises herein. SMUD will notify both the Staff and the Committee if it believes that there are any errors in the Staff's presentation of the conditions that have already been agreed upon.

5. The Committee Should Adopt SMUD's Version of the Conditions of Certification.

Based on all of these analyses, compliance with all of the applicable regulations and the mitigation that SMUD has proposed for the project, CPP will comply with the applicable federal, state, and local laws, ordinances, regulations, and standards, and with mitigation, does not result in any significant air quality impact.

- CPP has no significant impacts to local air quality.
- CPP will meet or exceed the SMAQMD's BACT requirements, meaning CPP will minimize local air quality effects.
- CPP's air impacts analysis confirms that there will be no significant local air quality effects.
- The Health Risk Assessment performed for the CPP confirms that there are no adverse local air quality impacts.
- CPP will have no significant unmitigated impacts on regional air quality.
- CPP will not cause any significant unmitigated cumulative air quality impacts.
- CPP has identified and obtained emission reduction credits to fully offset and mitigate any potential regional air quality impact.

- SMUD and the SMAQMD agree that CPP will not interfere with the attainment and maintenance of any state or federal ambient air quality standard.
- SMUD and the SMAQMD agree that the 10 ppm ammonia slip limit imposed by the SMAQMD is adequate to protect air quality on both a local and regional basis.
- CPP does not warrant more stringent construction mitigation conditions than the Commission has adopted for other projects.

Therefore, this Committee should adopt the changes to Staff's proposed Conditions of Certification described above.

B. Visible Plumes/Visual Resources.

With implementation of Conditions of Certification VIS-1 through VIS-5, SMUD's and Staff's experts agreed that the CPP will be in compliance with the applicable federal, state, and local LORS and any potential impacts will be mitigated to a level of insignificance. (FSA 4.12-1 and 4.11-1; SMUD's Visual Resources Testimony, February 27, 2003, p. 2.) To reach this conclusion, SMUD's and Staff's experts considered the visual quality of the area, including the number of sensitive receptors in the area, and analyzed how that visual quality would be impacted with the construction and operation of the CPP. (FSA 4.12-2 to 4.12-5 and 4.11-2 to 4.11-4; AFC 8.11-3.) The experts considered the impacts on visual resources from the project's construction activities; the plant's structures and facilities, including transmission lines and the natural gas pipeline; and plumes that would be visible during certain times of the year from the facility's cooling towers. (AFC 8.11-11 and 8.11-12; FSA 4.11-1 and 4.12-6 to 4.12-8.) The conclusion of both SMUD and Staff that the project would not have a significant impact on visual resources was not refuted during the hearing.

1. Impacts of Nighttime Lighting of Site Will Be Minimal.

During the hearing, Ms. Peasha expressed concerns that statements by Mr. Flake, SMUD's witness on compliance issues, revealed a potential impact from nighttime lighting that

had not been properly considered by Staff. In his testimony, Mr. Flake noted that lighting on the construction site may be required "during certain times of the project [when] there may be some small activity on a second or partial shift in the evening" and "during the winter hours … during the morning and evening hours for worker safety and a very, very, small amount …for security purposes." (3/14 RT 36.) He noted, however, that all construction lighting will be done in compliance with Condition of Certification VIS-4, which requires that SMUD ensures "lighting for construction of the power plant is used in a manner that minimizes potential night lighting impacts." (3/14 RT 30; FSA 4.12-44.) During the hearing, Mr. Clayton clarified that his conclusion that there would be no significant impact on visual resources took into account evening deliveries and evening construction shifts. (3/14 RT 45-46.) Therefore, Mr. Flake's testimony did not reveal any new information that would either change or alter the assumptions on which Staff had based its conclusion that with the implementation of VIS-4, CPP would not have any significant impact during construction or operation on the area's nighttime sky. (3/14 RT 46 (noting that Staff would not recommend different conditions even if there were multiple shifts, including an evening shift).)

2. Cooling Tower Plumes Do Not Create A Significant Impact to Visual Resources.

During the hearing, Ms. Haydon, one of SMUD's experts on visual resources, testified that the visual impact of plumes from CPP's cooling towers will be "less than significant." (3/14 RT 33.) Dr. Priestly, SMUD's other expert on visual resources, explained the factors used to reach that conclusion.

i. Plumes' Intermittency Reduces Their Potential Impact.

Dr. Priestly and Ms. Haydon's impact assessment of cooling tower plumes on the visual quality of the area included review of the plume frequency modeling analysis. The modeling analysis shows that large plumes that could significantly impact the area's visual quality will only occur for a "relatively short duration," within "relatively limited hours during the year." (3/14 RT 34.) Dr. Priestly noted that in assessing the impact of a "tenth percentile" plume, which would be about 272-feet long, 384-feet tall and 154-feet wide, one must consider "to what extent is it blocking highly valued views, to what extent does it effect the overall character and quality of the environment." (3/14 RT 34-35.) It is, therefore, not only the size of the plume and the number of hours of the day that it is present that will determine whether there will be a significant impact on visual resources; it is also important to consider the presence of the plumes within the proper context. For example, whether a plume is intermittent or is present during the middle of the day, versus in the early morning or evening, are relevant factors in considering the significance of a plume's impact on visual resources. (3/14 RT 75-76, explaining that largest plumes will be present around the first hour of daylight.)

SMUD's description of the importance of the plumes' intermittency in assessing the visual impact of the CPP was echoed by Staff, who explained that although modeling suggests that plumes of 600 meters or more could be visible approximately 60 days of the year, the actual hours of the day when the plume would be visible would be minimal. (3/14 RT 104-105, 75-76; FSA, Visible Plumes, Appendix B, Table 4, p. 5.) Mr. Edwards noted that the data set forth in Table 4 of Appendix B of the FSA on Visible Plumes demonstrates that the majority of the time, 74 percent of the days analyzed, there would either be no visible plumes or plumes lasting less than two hours. (3/14 RT 105-106.)

ii. Impact of Plumes Must Consider Context - Which Includes Rancho Seco.

Additional factors considered by Dr. Priestly and Ms. Haydon in concluding that plumes from the CPP will not have a significant impact on the area's visual resources include their assessment of the existing visual quality of the site. (3/14 RT 35.) Dr. Priestly acknowledged that although the presence of the plume would have some adverse effect on the setting, "those effects would not be so substantial *in that particular context* to constitute a significant effect." (emphasis added) (3/14 RT 35.)

Both SMUD and Staff concluded that the visual quality of the area was moderate, in part because of the presence of the Rancho Seco Plant. (AFC 8.11-10; FSA 4.11-6 to 4.11-7, 4.12-11 to 4.12-14 (assessing visual quality of each KOP).) Although Ms. Peasha questioned whether the Rancho Seco Plant should be considered because it is being decommissioned, the fact remains that there are currently no plans or funding for the removal of the existing cooling towers or other prominent structures. It is, therefore, appropriate to consider the presence of the Rancho Seco Plant as part of the existing landscape when analyzing the visual quality of the area, including the cumulative impact of the CPP on the existing environment. (3/14 RT 21-22.)

Although Staff's and SMUD's witnesses acknowledged that the impact of putting a power plant on the proposed site would probably be greater if the Rancho Seco Plant were not present, no one testified that the impact would be significant. (3/14 RT 24, 51, 52.) In part, this is because there are a number of Conditions of Certification that will minimize the visual impact of the CPP on the surrounding environment, including surface treatment of the project's structures and buildings with colors that blend into the landscape and the use of fast-growing

native trees to help screen the facility from the surrounding areas. (FSA 4.12-42 - 4.12-44 (Condition of Certification VIS-2 and VIS-3).)

iii. Use of Dry Cooling or Wet/Dry Cooling Has Disadvantages.

Some questions were raised at the hearing about whether SMUD should be required to incorporate dry-cooling or a wet/dry plume abatement system for the CPP. (3/14 RT 77-81.) Although there was some evidence that these technologies have the capability to reduce the presence of plumes, there are additional considerations that make their incorporation into the project undesirable. For example, use of a dry-cooling system would result in significant loss of output during hot periods of the year, which is precisely the time that SMUD has substantial demands for power from its customers. (DR Set 1E, p. 7.) From a visual resources point of view, any benefit of not having visible plumes would arguably be lost by the increased bulk of the air-cooled condenser structures. For dry-cooling, the height of these structures would be 100-120 feet tall and would clearly dominate the visual appearance of the plant. (DR Set 1E, p. 7.) By comparison, visible plumes are only present from November to April and their presence is intermittent, and for short durations.

Similarly, the use of the hybrid, wet/dry-cooling systems results in significant reductions in output. The estimated annual average loss of output is 2.4 percent, with peak energy losses of 3.5 percent, when SMUD customer demand is at its highest. (DR Set 1E, p. 11.) Like the air-cooled condensers needed for dry-cooling, the hybrid system would be significantly larger and a more dominant presence in the landscape than the wet cooling system proposed for CPP - 90 to 100 feet high versus 40 to 45 feet high; and requiring about 0.7 of an acre more than the wet cooling system. (DR Set 1E, p. 12.)

3. The Construction and Operation of CPP, Including Lighting and Cooling Tower Plumes, Will Comply with LORS and Will Create a Visual Impact That is Less Than Significant.

As demonstrated by the analysis offered by SMUD's visual resource experts, the CPP will comply with LORS. In addition, with the implementation of the Conditions of Certification requested by Staff and accepted by SMUD, CPP construction and operation lighting will be minimized, the facility's colors and landscaping will minimize any contrast with the surrounding area, and the cooling tower will be designed consistent with the modeling analysis resulting in plumes of limited duration. Therefore, both SMUD's and Staff's experts reached the conclusion that the CPP will not create a significant environmental impact on visual resources.

C. Hazardous Materials Management/Worker Safety and Fire Protection.

1. Hazardous Materials Management.

SMUD and Staff are in agreement that their jointly proposed Hazardous Materials Management ("Hazmat") conditions of certification will ensure that the Project is designed, constructed and operated to comply with all applicable LORS and to protect the public from significant risk of exposure to an accidental release of any hazardous material. (FSA, p. 4.4-20.)

The final set of conditions incorporating the revisions jointly recommended by both SMUD and Staff are contained in Staff's Supplemental Testimony and Revised Conditions of Certification, which were filed on March 12, 2003, and admitted into the record on March 14, 2003. (3/14 RT 258, 262.) The joint conditions are supported in the record by the unchallenged written testimony of Staff experts Alvin Greenberg, Ph.D. and Rick Tyler (FSA, pp. 4.4-1 to 4.4-25) and SMUD's experts Karen Parker, Jerry Salamy, Colin Taylor, M.I. MechE., C.E., Kevin Hudson, P.E., and Bob Nelson. (SMUD Group 1 Testimony of Ms. Parker and Mr. Salamy

[Hazardous Materials Management], Mr. Nelson [Facility Design and HAZ-8], Mr. Taylor and Mr. Hudson [General Project Development, including Project Description, Facility Design, Power Plant Reliability, Power Plant Efficiency, and General Conditions]; admitted 3/13 RT 222-224; see also 3/13 RT 200-209.)

The joint conditions include HAZ-8, which requires SMUD to direct all vendors delivering hazardous materials in quantities greater than 1,000 gallons to the Project Site to verify whether fog conditions exist along the delivery route and, if they do, to use a lead vehicle equipped with fog lights and radio to accompany the delivery vehicle. In addition, HAZ-8 requires SMUD to direct all such vendors "not to deliver during the time in the mornings and afternoons when children are going to and from Arcohe School located along the transportation route or when children are present outside for physical education, recess or outdoor after-school events." SMUD is also required "to coordinate with the school regarding the times when students may be traveling the transportation route or when children are outdoors."

Ms. Peasha expressed some concerns about how a truck driver would know whether there is fog in the vicinity. Staff expert Mr. Tyler explained that the truck drivers are required to check with the California Highway Patrol ("CHP") and Caltrans to evaluate road conditions. In addition, deliveries are not allowed during times when school children are likely to be on the road. (3/13 RT 202-204.) Mr. Tyler further testified that the drivers of trucks making hazardous waste deliveries are highly trained and their accident rates are "extremely low, far below most other vehicle carriers." (3/13 RT 205.)

2. Worker Safety/Fire Protection.

SMUD and Staff are in agreement that the jointly proposed Worker Safety/Fire Protection conditions will ensure compliance with LORS and the requirement for SMUD to

submit and implement both a Project Construction and Project Operation Safety and Health Program will adequately protect workers during construction and operation, protect against fire, and provide adequate emergency response procedures. (FSA, p. 4.15-10-11.)

During the Hazmat portion of the hearing on March 13, 2003, Ms. Peasha and the Committee expressed concerns about how well plant personnel and local and regional fire departments, Hazmat teams, and other public safety agencies are equipped to respond to emergencies occasioned by a hazardous waste spill, e.g., aqueous ammonia, or to fires, both en route and at the Project Site.

The testimony of Bob Nelson, SMUD's Superintendent of Thermal Generation Assets, who has overseen the operation of SMUD's four gas-fired power plants for the last four years. and Rick Tyler, Staff's long time Hazmat expert, put this issue in proper perspective. Mr. Tyler testified that "[a]queous ammonia is much less hazardous than the anhydrous form. If anhydrous was present at this facility that would be a much different circumstance." (3/13 RT 247.) Mr. Nelson, who has 17 years experience in the energy industry managing the operation of numerous power plants throughout the country, 12 years of which involved handling aqueous ammonia and/or anhydrous ammonia that have been used in selective non catalytic reduction and selective catalytic reduction ("SCR") systems similar to the one proposed for the Project, stated under oath: "I can attest to the fact that during that 12-year time I have not witnessed a release of ammonia onsite or during transportation connected with the facilities that I have operated." (3/13 RT 250.)

Mr. Nelson attributed this spotless record to the excellent preventive procedures and training used by SMUD. (3/13 RT 250-251.) Mr. Nelson testified that all of SMUD's thermal power plants in the Sacramento area employ similar ammonia unloading procedures, which

involve standby plant personnel in addition to the already highly trained driver. (Id.) He testified that at least two plant personnel who are trained to handle hazardous materials spill and/or fires would be on the CPP site at all times. (3/13 RT 240-242.) He further testified that "there's very little of the plant proper that's actually combustible that is not already protected by automatic fire detection and suppression." (Id.)

Staff expert Mr. Tyler corroborated Mr. Nelson's testimony, stating that "the risk profiles from this facility, the types of materials being used, and the controls involved really make it very unlikely that we would have a significant hazmat event." (3/13 RT 247.) Mr. Tyler went on to testify as follows:

> In the case of aqueous ammonia with catchment basins and the type of equipment that we have here, we've already put in place conditions where the hazardous materials would, if they were released . . . the material automatically drains from the catchment basin into a covered area which suppresses virtually all emissions from the facility. I would also point out that every hazmat delivery truck driver has to be trained extensively on how to respond to an incident involving his truck. If there were a tank failure, the tank would automatically drain into the catchment basin. (3/13 RT 248.)

At the Committee's direction, this issue was the subject of further testimony at the May 12 hearing and will be briefed in greater detail on June 13, 2003. SMUD's and Staff's testimony on March 13, 2003, and the public safety panel's testimony on May 12, 2003, demonstrated: (1) that SMUD has designed the proposed facilities to minimize the risk of any accidental spills of hazardous materials; and (2) that responding local agencies are prepared to deal with emergencies in the unlikely event that they occur.[2] Nevertheless, SMUD will provide the Committee by July 1, 2003, the additional list of personnel, training, and equipment needs of local and County fire and public safety agencies to assure the safety of the public, plant workers,

[2] In addition, the jointly proposed Traffic and Transportation Conditions (TRANS-1 through TRANS-9) discussed below provide additional measures of protection to minimize the risk of accidental spills or other accidents. (See Part III.C, infra.)

and property from plant generation, in accordance with the May 19, 2003, Committee Order Re: Fire Safety.

D. Water and Soil Resources/Retention Basin Issue.

1. Water and Soil Resources.

SMUD and Staff are in agreement that their jointly proposed Water and Soil Resources conditions of certification will ensure that the Project is designed, constructed and operated to comply with all applicable LORS and will not have any significant adverse impacts on water and soil resources. (FSA, p. 4.14-32.) In particular, the Project will not lead to accelerated wind or water erosion and sedimentation; exacerbate flood conditions in the vicinity of the Project; adversely affect surface or groundwater supplies; or degrade surface or groundwater quality.

The conditions jointly recommended by both SMUD and Staff are contained in Staff's FSA, Part 2 (Section 4.14), which was filed on February 28, 2003, and admitted into the record on March 14, 2003. (3/14 RT 258, 262.) The joint conditions are supported in the record by the unchallenged written testimony of Staff experts Phil Lowe, P.E., Richard McCann, Ph.D. and Richard Anderson (FSA, pp. 4.14-1 to 4.14-41), and SMUD experts Bob Nelson, Colin Taylor, C.E., Kevin Hudson, P.E., and Scott Flake, P.E. (SMUD Group 1 Testimony of Mr. Nelson (Facility Design), Mr. Taylor and Mr. Hudson on General Project Development (including Project Description, Facility Design, Power Plant Reliability, Power Plant Efficiency, and General Conditions) and of Mr. Flake on Facility Design; admitted 3/13 RT 222-224, 265; 3/14 RT 254.)

SMUD committed to using Zero-Liquid Discharge ("ZLD") early on in this proceeding as a means of reducing its water use for both Phases I and II. (See also Condition WATER & SOIL 7.) Under the Joint Stipulation on Water Source for CPP Phases I and II (FSA, p. 4.14-

41), which was executed by SMUD and Staff on February 7, 2003, SMUD renewed its commitment to use ZLD. In addition, the Stipulation requires SMUD to study the use of reclaimed water (per Title 22 California Code of Regulations ["CCR"]) for Phase II to the extent it is available within 15 miles of the CPP site, and provided that the Commission determines it is economically feasible and reasonably priced in relation to the costs of other sources of Title 22 water for power plants licensed by the Commission.

The Stipulation further requires SMUD to assume the cost of licenses, permits, rights-of-way, materials, labor and installation of up to 15 miles of reclaimed water pipeline. To ensure electrical generating reliability for SMUD customers, the Stipulation also provides that SMUD will have the capability of using FSC water for backup water for Phase II, should such an emergency take place that renders Title 22 water systems and related equipment inoperable. Finally, the Stipulation would give SMUD the future option of proposing an alternative arrangement allowing a one-to-one offset of Title 22 water at another project in exchange for SMUD's using FSC water for CPP Phase II. Water supply would be one of three issues contemplated for complete review in the Phase II AFC licensing proceeding, along with Air Quality and Transmission System Engineering. (Proposed Finding, FSA Exec. Summary, p. 1.1-7.)

2. Retention Basin Issue/Waste Management.

During the Water and Soil Resources hearing, Ms. Peasha referenced a "Vista" report and raised a concern about whether it is possible that an underground storage tank could be located on the Project Site, particularly in the vicinity of the proposed retention basin. SMUD demonstrated on the record that no such tank exists. Based on the Phase 1 environmental assessment done by B. Demarr Hooper, a State of California registered Environmental Assessor

(3/13/RT 276), and other evidence presented, Mr. Hudson testified that "there's no reason to believe that there is or has been an underground storage tank on this CPP property." (3/13 RT 280.) Mr. Hudson's testimony was corroborated by the oral testimony of SMUD witnesses Mr. Taylor and Mr. Redeker (3/13 RT 282-292, 295-298), as well as the oral testimony of Staff witness Mr. Ringer (3/13 RT 293-294), and the uncontested written testimony of Staff witness Dr. Greenberg (admitted 3/13 RT 305).

Nonetheless, at the Committee's suggestion, SMUD agreed to perform underground testing before constructing the retention basin. (3/13 RT 298.) This agreement was memorialized in Condition WASTE-7, submitted by Staff on May 9, 2003, and admitted on May 12, 2003. (5/12 RT 378.) WASTE-7 requires SMUD "to conduct geophysical sensing, using either a magnetometer or ground penetrating radar, at the upper northwest corner of the construction site at the proposed location for the retention basin." With this condition, the Committee can safely conclude that the project will comply with all applicable LORS and will not result in any significant adverse impacts in this area.

E. Compliance.

Staff and SMUD are in agreement concerning the jointly proposed Compliance Conditions of Certification; the final set of conditions incorporating the revisions jointly recommended are contained in Staff's Supplemental Testimony and Revised Conditions of Certification, which were filed on March 12, 2003, and admitted into the record on March 14, 2003. (2/19 PHCS, pp. 1, 3; 3/14 RT 258, 262.)[3]

[3] SMUD took exception to Staff's initially proposed Condition COM-8. (2/19 PHCS, pp. 1, 3.) However, after consultation with Staff at a subsequent workshop, SMUD and Staff agreed on SMUD's revisions to COM-8, which were incorporated into Staff's Supplemental Testimony and Revised Conditions of Certification, filed on March 12, 2003. Staff acknowledged in the record through the unchallenged written testimony of Alvin Greenberg, Ph.D., and Rick Tyler, that SMUD's unique experience in infrastructure security as the owner and operator of the Rancho Seco Nuclear Power Plant warranted a revision of COM-8 from a "specification standard" to a "performance standard" and was appropriate for the site. (3/14 RT 258, 262.)

During the evidentiary hearings, Ms. Peasha attempted to bolster her position on the laydown area by attacking Staff's testimony on Compliance. Ms. Peasha stated, without citation to authority, that "CPM" is an acronym for critical path method, which she alleged construction workers use to ensure compliance amongst managers, subcontractors, and for the scheduling of equipment and that SMUD's construction manager should distribute to unnamed persons a critical path method document. (3/14 RT 10-11) The Committee should reject Ms. Peasha's unfounded, irrelevant request because it is not supported by the record in this proceeding.

Instead, the record demonstrates that the Compliance Conditions of Certification jointly recommended by SMUD and Staff already contain appropriate mechanisms to ensure compliance. For example, the joint Conditions provide for a detailed complaint procedure by which anybody can file a complaint alleging nonconformance, which would be investigated by the CPM. (FSA, pp. 7.1-13-7.1-15; 3/14 RT 8.) Moreover, as part of the verification procedure, Staff will make site visits to ensure that the project is in conformance with the Conditions of Certification. (FSA, p. 7.1-4; 3/14 RT 8.) Should Staff determine the project to be noncompliant, they have the authority to halt construction activities. (FSA, p. 7.1-13) In addition, Staff informed Ms. Peasha that the construction manager would create the document, referred by her as the critical path method document, with the project owner submitting it to the CPM. (3/14 RT 11.) SMUD's expert, Mr. Taylor, testified that he has over 35 years experience in planning critical path networks, and remains available to address any critical path planning questions posed by either Ms. Peasha or Staff. (3/14 RT 186.) Finally, as the Conditions of Certification make clear, SMUD is required to submit monthly compliance reports that may be used to ensure SMUD's conformity with the Commission's requirements. (FSA, pp.7.1-4-7.1-7; 3/14 RT 10.)

Based on the evidentiary record, the Committee should conclude that the compliance and monitoring provisions jointly proposed by SMUD and Staff will satisfy the requirements of Public Resources Code section 25532, and should therefore adopt the jointly proposed conditions as part of its Proposed Decision.

F. Noise & Vibration.

Staff and SMUD are in agreement concerning the Noise & Vibration proposed Conditions of Certification. (FSA, pp. 4.6-1–4.6-29; 3/3 Group 1 Testimonies: Noise & Vibration Testimony, p. 1; 3/12 Supp. Test. & Conditions, pp. 43-45; 5/12 RT 374-378.) The joint conditions are supported in the record by the written testimony of Staff's expert Jim Buntin and SMUD's expert Mark Bastasch. (Id.)

In her filed testimony for the March 14, 2003, Evidentiary Hearing, Ms. Peasha presented Dustin Peasha's written testimony regarding ambient noise levels. (3/10 Peasha Written Testimony, p. Noise-1.) In response to the Committee and Ms. Peasha's concern regarding the protection of individual receptors (e.g., R-2), Staff and SMUD agreed to draft language regarding sound attenuation and mitigation at the receptors site. (3/14 RT 117-120.) Ms. Peasha testified that the adoption of this additional Condition of Certification would sufficiently address her concerns regarding noise. (3/14 RT 119.) Staff and SMUD jointly proposed Conditions of Certification (including Noise-11) were filed on May 9, 2003, and admitted into the record on May 12, 2003.[4] (5/12 RT 374-378.)

[4] At the March 14, 2003, Evidentiary Hearing, the Committee proposed that Staff and SMUD draft language as a condition that would protect individual receptors. (3/14 RT 116-120.) To that end, Staff presented and SMUD agreed, as a Condition of Certification (Noise-11), to offer acoustical improvements to property owners of any existing residence (except R1) within the 35 dBA contour of the plant identified on Figure 8.5-2R3 (SMUD 2003c), who requests an operation noise survey within one year of the start of commercial operation of either Phase 1 or 2, provided the steady-state plant noise level exceeds a criterion value of 36 dBA within 25 feet of the property owner's residence. (5/12 RT 374-378.) The acoustical improvements, for existing residences meeting the Noise-11 criteria, to be evaluated include, but are not limited to, replacement of single-pane windows with acoustical-rated windows, upgrade hollow-core exterior doors with solid-core doors, providing additional sound insulation in walls

In order to predict the likely noise effect of the Project on adjacent sensitive receptors, SMUD commissioned ambient noise surveys of the area. (FSA, p. 4.6-4; 9/13 AFC 8.5-7.) The Staff FSA determined that noise levels at the quietest contiguous nighttime hours for R-2 (located within the 35 dBA contour of the plant identified on Figure 8.5-2R3 (SMUD 2003c)) was 29 to 33 dBA L90. (FSA, p. 4.6-4.) SMUD's incorporation of noise reduction measures into the design of the project and the acoustical improvement condition (Noise-11) will ensure that the Project will achieve noise level standards that will prevent a significant noise impact to these sensitive receptors. (FSA, p. 4.6-11; 03/12 Supp. Test. & COC, pp. 43-45; 5/12 RT 374-378.) Therefore, even though allowable noise levels under LORS (e.g., Sacramento General Plan nighttime standard is 45 dBA L50) could be substantially higher than existing background noise levels (e.g., at R-2 Staff determined quietest contiguous nighttime hours of 29-33 dBA L90), SMUD agreed to provide acoustical improvements if steady-state plant noise levels exceed 36 dBA within 25 feet of a property owner's residence within the 35 dBA contour of the plant identified in Figure 8.5-2R3 (SMUD 2003c). (FSA, p. 4.6-11; 5/12 RT 374-378.)

Based on the evidence of record, the Committee is urged (1) to conclude that with the implementation of the Conditions of Certification to be incorporated as a part of its Proposed Decision, the project conforms with all applicable LORS and CEQA and will not result in any significant noise impacts, that all potential noise impacts will be mitigated to insignificance, and (2) to adopt those Conditions of Certification as part of its Proposed Decision.

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and around penetrations or cracks, and installation of air conditioning systems, if not already present. (Id.) In addition, SMUD entered into an agreement with Mr. Frank Loretz, the property owner of R-1, to relocate his employee's trailer so that its new location will enable the Project to comply with the ordinance pertaining to residential noise level. (DR3N – Attachment No-219.)

G. Traffic and Transportation.

SMUD and Staff are in agreement that their jointly proposed Traffic and Transportation ("TRANS") conditions of certification will ensure that the Project is designed, constructed and operated to comply with all applicable LORS and will mitigate any Project impacts to a level of insignificance. (FSA, p. 4.9-21, 22.) The joint Conditions were revised in two subsequent filings. TRANS-4, 5 and 7 were revised in Staff's Supplemental Testimony and Revised Conditions of Certification, filed on March 12, 2003, and admitted into the record on March 14, 2003. (3/14 RT 258, 262.) TRANS-5 was further revised in the May 9, 2003, Revised Conditions (admitted at 5/12 RT 374-378).

Conditions TRANS-1 through TRANS-8 are supported in the record by the unchallenged written testimony of Staff experts James Fore and Eileen Allen (FSA, pp. 4.9-1 to 4.9-27, admitted 3/14 RT 262) and SMUD's experts Jeanne Acutanza (SMUD Group 1 Testimony of Jeanne Acutanza, P.E. [Traffic and Transportation], admitted 3/14 RT 254). In addition, Staff's May 9 filing included two new conditions, TRANS-9 and TRANS-10, to respond to concerns raised by Ms. Peasha and the Committee. These two additional conditions are supported by oral testimony at the March 14 hearing, as discussed in detail below.

SMUD and Staff analyzed the available capacity for regional roadways and determined that the potentially affected roadways have the capacity to accommodate Project-related traffic for both the construction and operation of the Project. (Id.) Staff concluded "that during the construction phase, increased roadway demand resulting from the daily movement of workers and materials would not significantly increase congestion and delay, and the level of service on each of the roadway segments would be at acceptable levels." (Id.) Staff and SMUD further concluded that the potential impact of construction traffic affecting school bus pick-up/drop-off

activity on Twin Cities and Clay East Roads would be mitigated through the proposed conditions TRANS-5 and TRANS-8, which are discussed further below. (Id.) With respect to power plant operation, Staff witnesses James Fore and Eileen Allen concluded as follows: "The operational phase of the plant would result in only a slight increase in the daily movement of workers and materials such that the impact would be negligible." (FSA, p. 4.9-22.)

Staff's assessment further corroborated the findings discussed above under the Hazmat section, i.e., that "[t]he transportation and handling of hazardous substances can be mitigated to insignificance by compliance with federal, state, and local standards; permits established to regulate the transportation of hazardous substances; and staff proposed conditions of certification." (Id.)

At the hearings on March 14, 2003, Ms. Peasha raised concerns about the Project's potential traffic impacts on Clay East Road. She presented the testimony of Lodi Police Sergeant Stephan Carillo to support these concerns. (See, generally 3/14 RT 263-278.) In addition, Ms. Peasha, Ms. Moore and the Committee expressed serious concerns about the Project's potential impact on the safety of school children in the vicinity of Arcohe Elementary School, particularly when loading or unloading from school buses. (See, e.g., 3/14 RT 161, 280.)

1. Clay East Road/Construction Access.

Mr. Carillo testified on his own behalf as a resident of Clay East Road and not as a representative of the Lodi Police Department (3/14 RT 264, 275.) He testified that he was concerned that the width of Clay East Road is only 22 feet, six inches, with 3-foot ravines/drainage ditches on either side (3/14 RT 265), but he acknowledged that this width is legally allowed under state law (3/14 RT 277). Because Mr. Carillo was not familiar with the

proposed conditions of certification, he could not testify about the adequacy of Staff's and SMUD's proposed mitigation to address his and Ms. Peasha's concerns. (3/14 RT 271.) He further acknowledged that he was not aware that the additional traffic due to operations would total less than 18 round trips per day. (3/14 RT 275-276.)

In short, although Mr. Carillo's and others concerns about pedestrian and vehicle safety on Clay East Road are certainly valid concerns, they presented no evidence that the construction or operation of the Project would result in any traffic impacts to Clay East Road or other area roads. To the contrary, SMUD presented compelling evidence to demonstrate that its decision early on in the case to use an alternative construction access route that avoids Clay East Road (other than the eastern end of the road next to Rancho Seco where there are no residents and no pedestrians) leads inexorably to the conclusion that the Project will have no significant traffic impacts.

Project Director Colin Taylor testified that all of the CPP construction traffic was originally proposed to use Highway 104 (Twin Cities Road) off Highway 99, then Clay East Road from the Herald town center, which was the original construction access route for the Rancho Seco Plant when it was built in the early 1970's. (3/14 RT 145.) Mr. Taylor estimated that approximately 300 construction workers would be at the job site. (3/14 RT 143.) The large pieces of equipment would come by rail and be stored on the Rancho Seco property, but most other equipment would have been delivered along the proposed construction access route. (Id.)

Don Logan, P.E., a transportation engineer for CH2MHill, who designed the alternate access route described below, testified that Clay East Road was actually adequate to handle safely even the construction traffic from both phases of the Project. (3/14 RT 154, 157.) Nonetheless, as Mr. Taylor testified, after talking to local residents, including Ms. Peasha and

school representatives, and observing the traffic, SMUD "came to the conclusion that it was not appropriate to use Clay East Road for construction traffic." (3/14 RT 146.)

After considering a number of alternative routes, SMUD settled on the proposed construction access route using the existing State Highway 104 (Twin Cities Road) off Highway 99, all the way to the Rancho Seco main entrance, then proceeding east of the nuclear plant on the existing road to Rancho Seco Park. From there, SMUD would build a new road for a quarter mile or so south along an existing firebreak to the end of Clay East Road, where the route would then use the existing road to the Project site. The route would end at the gate of the new CPP site on the right, and the gate to the laydown area on the left. (3/14 RT 149-150; see also AFC Supp. B, Fig. 1-8, and Evid. Hrg. Ex. 1, 2 and 4.)

During plant operations, Mr. Nelson testified that the Project will likely result in only 18 round trips per day (about 35 individual trips per day). (3/14 RT 152.) Because this is such a negligible number given the current traffic of about 790 trips per day on Clay East Road (DR Set 1M, p. 1; 3/14 RT 153), SMUD decided to propose allowing operations traffic to use State Route 104, down Clay East Road to the plant site. (Id.) Mr. Logan testified that Clay East Road was clearly adequate to handle safely traffic generated by Project operations. (3/14 RT 157.) His testimony is corroborated by the uncontested written testimony of Staff experts James Fore and Eileen Allen (FSA, pp. 4.9-1 to 4.9-27) and SMUD's expert Jeanne Acutanza (SMUD Group 1 Testimony of Jeanne Acutanza, P.E. [Traffic and Transportation]).

2. School Bus and Pedestrian Safety.

SMUD shares the school bus and pedestrian safety concerns raised during the evidentiary hearings. As Mr. Hudson testified: "one of our primary concerns that became evident, was the bussing of school children and school children in the morning and in the afternoon entering and

leaving school." (3/14 RT 162.) In addition to ensuring that construction traffic will be scheduled to work around the times that students were being transported either to or from schools, SMUD Project Director Taylor agreed with the Committee's request to provide a comprehensive program of worker awareness training. (3/14 RT 164-168.)

At the conclusion of the March evidentiary hearings, SMUD and Staff agreed to prepare joint conditions to add to TRANS-5 to implement this proposal. (3/14 RT 206.) Those conditions were presented in Staff's May 9, 2003, Revised Conditions, which were admitted into the record on May 12, 2003. (5/12 RT 378.) The new TRANS-9 requires SMUD to select a traffic safety specialist (TSS), such as a County Sheriff or CHP officer, to conduct a Worker Traffic Safety Program (WTSP) school bus/school children awareness training program.[5] The joint TRANS-10 condition specifies the detailed contents of the awareness training program. Finally, Staff and SMUD agreed to add a provision to condition TRANS-5 which requires SMUD's construction traffic control plan, which is to be worked out in consultation with Staff and local agencies, to include consideration of "whether road signs should be installed along Twin Cities Road to inform drivers of school bus zones." SMUD is willing to commit not just to consider, but to install such signs.

In conclusion, SMUD urges the Committee to adopt the proposed TRANS-1 through TRANS-10 conditions proposed by SMUD and Staff. These conditions will ensure that the Project will be designed, constructed and operated to comply with all applicable LORS and will mitigate any project impacts to a level of insignificance.

[5] The Staff filing indicated that there was a disagreement with SMUD over the language of TRANS-9. However, SMUD indicated at the May 12 hearing that it would agree to Staff's proposed TRANS-9 language, so long as it was understood that the training could be done by video presentation, as well as in-person. (5/12 RT 375.)

H. Land Use/Construction Laydown Area.

1. Land Use.

SMUD and Staff are in agreement that the Project will comply with all applicable LORS and will result in no significant land use impacts. (FSA, pp. 4.5-13, 14.) This conclusion is supported in the record by the unchallenged written testimony of Staff expert James Adams and SMUD's expert Katy Carrasco. (FSA, pp. 4.5-1 to 4.5-20, admitted at 3/14 RT 258, 262; SMUD Group 1 Land Use Testimony, admitted 3/13 RT 253-254.)

In particular, the uncontested testimony of both SMUD and Staff demonstrated that the Project: (1) is compatible with the general plan designations and zoning for the three affected jurisdictions (i.e., Sacramento County, Yolo County, and the City of Elk Grove); (2) would not physically divide or disrupt an established community; (3) would not substantially preclude or restrict existing land uses; (4) would not preclude or restrict any planned land uses; and (5) with mitigation, would not cause any significant dust, noise, traffic, or visual impacts. (FSA, p. 4.5-14; see also sections on Air Quality, Noise, Traffic and Transportation, and Visual Resources.) The uncontested record further shows that the CPP would not contribute substantially to any cumulative land use impacts, and should be approved without any land use conditions. (Id.)

2. Construction Laydown Area.

Ms. Peasha expressed concerns, however, about the necessity for the laydown area south of Clay East Road, across from the main plant site. She presented her husband, Jacques Peasha, as a witness to argue that SMUD should instead use the existing Rancho Seco parking lot, located 1.3 miles from the construction site, as a remote laydown area from which construction workers would be bussed. While Mr. Peasha has extensive experience working on smaller public works projects that he claimed sometimes had remote parking lots up to one-half mile

from the construction site, he has no experience ever working on a power plant project, or any project of the size, scope or dollar cost of the CPP. (3/14 RT 222, 224.)

Ms. Moore also expressed concerns about the proposed laydown area and testified that she thought the Project might not comply with the Resource Conservation Area designation in the County General Plan. She thought a laydown area to the west of the Project site might be preferable. (3/14 RT 209-220.) Upon cross examination, however, Ms. Moore admitted that SMUD's alternate access route to the east of the plant site would "largely address [her] concerns." (3/14 RT 231-232.) She also was not aware that the County Board of Supervisors had adopted a resolution finding that, in fact, the Project was consistent with the County General Plan. (3/14 RT 233; County Resolution officially noticed at 234; see also FSA, p. 4.5-9.)

SMUD persuasively responded on the record to the Peasha family's and Ms. Moore's concerns. Mr. Taylor, who has 35 years experience in power plant construction, working on over 20 projects throughout the world, including four previous SMUD projects, convincingly explained why Peasha's proposal to use the Rancho Seco parking lot as a remote parking lot for construction workers was terribly inefficient and would not work. (3/14 RT 186-190.) Among other things, such as project delay, he estimated that her proposal would cost SMUD about $6 million in added construction costs for Phase I alone. (3/14 RT 191.)

Conversely, the proposed laydown area to the south of Clay East Road (3/14 RT 188-189), which will be restored to its original state (3/14 RT 193, 200), was designed to minimize impacts and to avoid natural drainage swales (3/14 RT 194). (See generally, 3/14 RT 187-200; see also FSA, Fig. 8, AFC Supp. B, Fig. 1-8; Hearing Ex. 4.)

Mr. Taylor's testimony was corroborated by the testimony of Matt Kelly, Business Manager for the Sacramento-Sierra Building and Construction Trades Council. Mr. Kelly has

over 20 years experience in construction, working on a variety of projects, and is quite familiar with laydown areas. (3/14 RT 240-241.) He testified that he has never seen a laydown area located more than one mile from the construction site. (3/14 RT 241.) Mr. Kelly testified in convincing fashion about the problems such a remote laydown area or parking lot would create:

> I see difficulty transporting your construction workers from the area of their parking to the site of the work. I see problems transporting materials, material handling. I would think that you would have a veritable wagon train of forklifts traveling at a very low speed from your actual work site to your laydown yard. It just, it presents a myriad of problems that would probably be difficult to encompass just sitting here talking about the project. (3/14 RT 242.)

IV. CONCLUSION

For the reasons stated above and based upon the evidentiary record of this proceeding, SMUD urges the Committee to issue the Presiding Member's Proposed Decision ("PMPD") as soon as possible, recommending approval of the proposed Project, gas pipeline and other related facilities and including the following:

(a) Findings and conclusions that the Project will comply with all public health and safety standards, applicable air and water quality standards, and all other applicable local, regional, state, and federal laws, ordinances, regulations and standards (LORS); and

(b) SMUD's proposed conditions of certification for air quality and the conditions of certification jointly proposed by SMUD and Staff for all other technical areas, which contain all modifications, mitigation measures, conditions, or other specific provisions relating to the manner in which the proposed

facilities are to be designed, sited, and operated in order to:

1) protect environmental quality;

2) assure safe and reliable operation of the facility; and

3) comply with all applicable LORS.

Respectfully submitted,

ARLEN S. ORCHARD, General Counsel
STEVEN M. COHN, Assistant General Counsel
LOURDES JIMENEZ-PRICE, Attorney

Dated: _____

ORIGINAL SIGNED

_____
STEVEN M. COHN, Assistant General Counsel
Sacramento Municipal Utility District

JANE E. LUCKHARDT, Attorney
Downey Brand, LLP

Attorneys for SMUD

APPENDIX A - LOCAL AND REGIONAL AIR QUALITY IMPACTS

A. CPP has No Significant Impacts to Local Air Quality.

SMUD addressed local air quality effects from CPP with three different types of analyses: (1) pollution control technologies, (2) air quality impacts analysis, and (3) preparation of a health risk assessment. (SMUD Group 1 Testimony of Mr. Gary Rubenstein, Air Quality, pp. 10-12; 3/13 RT 29-30.)

1. CPP Will Meet or Exceed the SMAQMD's BACT Requirements, Meaning CPP Will Minimize Local Air Quality Effects.

First, with respect to addressing local air quality impacts, SMUD's experts analyzed the appropriate pollution control technology and the "best available control technology" ("BACT"). (SMUD Group 1 Testimony, Air Quality, pp. 10-11; 3/13 RT 29.) BACT is the fundamental cornerstone of any licensing process, requiring that new facilities use the cleanest technologies available. By ensuring that projects use the cleanest technologies, potential impacts on local air quality are minimized. (3/13 RT 29.)

In this case, the Sacramento Metropolitan Air Quality Management District's ("SMAQMD") Final Determination of Compliance ("FDOC") dated October 21, 2002 confirms that CPP complies with BACT. (FDOC, pp. 10-17.) The Staff, in the FSA, concurred in this conclusion. (FSA, p. 4.1-26.)

With respect to carbon monoxide, CPP will comply with this BACT requirement through the use of dry low-NO_x duct burners that minimize incomplete combustion. (SMUD Group 1 Testimony, Air Quality, pp. 10-11; FDOC, p. 2.) The SMAQMD has determined that BACT for CO is an emission limit of 4.0 ppmvd @ 15% O_2, averaged over three hours. (FDOC, p. 15.) In simplest terms, the CO requirements in the permit are so stringent that the carbon monoxide concentrations inside the stack will be at or below the ambient air quality standard for carbon monoxide, which is the level that is safe to breathe in ambient air.

Nitrogen oxides ("NO_x") will be controlled as well through a combination of two technologies. One is the use of dry low-NO_x combustors. The second is a system called selective catalytic reduction ("SCR"), a system that the Commission has reviewed many times before and found to be safe and effective. Each combustion gas turbine is designed to meet a NO_x emission concentration limit of 2.0 ppmvd NO_x @ 15% O_2, averaged over 1 hour, during all operating modes except gas turbine start-ups and shutdowns. (FDOC, pp. 11-12.) This meets the current SMAQMD BACT determination and exceeds the California Air Resources Board ("CARB") BACT determinations for NO_x. (FDOC, p. p. 11.)

Reactive organic compounds ("ROCs") will also be controlled through the use of dry low-NO_x combustors. (FDOC, p. 2.) The Applicant has agreed to ROC emission limitations of 3.30 pounds per hour and 0.00177 lb/MM BTU, equivalent to an emission concentration of 1.4 ppmvd @ 15% O_2. This emission limitation is more stringent than the current CARB BACT

determination for ROC of 2 ppmvd @ 15% O_2, averaged over 1 hour, and most importantly the SMAQMD determined this level satisfies BACT for ROC. (FDOC, pp. 13-14.)

Emissions of sulfur dioxide ("SO_2") and particulate matter ("PM_{10}") are controlled through the use of natural gas as a fuel. CPP will use exclusively CPUC-regulated natural gas, which satisfies the BACT requirement for SO_2 . (FDOC, pp. 15-16.) Similarly, PM_{10} emissions are controlled through the use of clean burning natural gas for the combustion turbines, which will result in minimal PM_{10} emissions and minimal formation of secondary PM_{10} . (FDOC, pp. 16-17.)

2. CPP's Air Quality Impact Analysis Confirms That There Will be No Significant Local Air Quality Effects.

Mr. Rubenstein testified that SMUD had performed a thorough air quality impact analysis, often referred to as a modeling analysis. (3/13 RT 28.) The air quality impact analysis uses dispersion models required by United States Environmental Protection Agency ("USEPA") and the SMAQMD, and a number of worst-case assumptions. (SMUD Group 1 Testimony, Air Quality, p. 11; 3/13 RT 28-30; FDOC, pp. 19-21.) This analysis is based on the assumption of worst case operating scenarios for the plant. Specifically, the analysis superimposes on that assumption of worst case operating scenarios, the assumption of worst-case emissions, the maximum allowable emissions from the plant, and worst-case weather conditions at the project site. (SMUD Group 1 Testimony, Air Quality, p. 11; 3/13 RT 30.)

Thus the air quality impact analysis assumes: (a) the worst case operating assumptions, (b) worst case emission factors, and (c) worst case weather conditions, even if (d) those physically cannot occur at the same time. (3/13 RT 30.) For example, the worst case of emissions from a power plant might occur during winter conditions when the ambient temperatures are lowest and the mass flow through the engines is highest. The worst-case meteorological conditions for dispersion might occur in the summer. The air quality impacts analysis nonetheless assumes that those worst-case emissions aspects of the wintertime apply during the summer meteorological conditions, even though that is not physically possible.

The air quality impact analysis shows the location and level of the greatest impact (unrestricted by county or air district boundaries). All other locations would have lesser levels of air quality impacts. In the case of CPP, the worst-case air quality impacts from the project were generally located within three kilometers of the project site. (AFC, p. 8.1-38; AFC Appendix 8.1E, p. 8.1E-2.)

The purpose of all of those conservative assumptions is to make sure that the construction and operation of CPP will not cause any violations of any air quality standards anywhere at any time under any weather conditions and under any operating conditions. (3/13 RT 30.) The air quality impacts analysis confirms that CPP will not cause any violations at any location at any time under any conditions. (SMUD Group 1 Testimony, Air Quality, p. 11; 3/13 RT 30; FDOC, pp. 19-21.)

3. The Health Risk Assessment Performed for CPP Confirms that there are No Adverse Local Air Quality Impacts.

The CPP Health Risk Assessment ("HRA") confirms that there will be no significant adverse local air quality impacts associated with CPP. The results of the HRA show that the health risk is not significant at any location, at any time, under any operating conditions. The public health impacts associated with the project are not in dispute with CEC Staff. (FSA, p. 4.7-18.)

B. CPP Will Have No Significant Impacts on Regional Air Quality.

CPP will have no significant impacts on regional air quality. This finding of no significant impact is confirmed by the two components to the regional air quality studies performed by CPP's experts: (1) cumulative impacts analyses regarding regional air quality; and (2) emission offset requirements. Both of these regional impact analyses are considered in turn below.

1. CPP Will Not Cause Any Significant Unmitigated Cumulative Air Quality Impacts.

SMUD's experts conducted several cumulative air quality impacts analyses for CPP that looked at the impacts of CPP and other reasonably foreseeable projects against the backdrop of existing background air quality levels. (3/13 RT 30-32.) As with the local air quality analysis, CPP used conservative assumptions on top of conservative assumptions in its cumulative air quality impact analyses. The first such analysis was included in the AFC (AFC, Sec. 8.1.5.2.2, pp. 8.1-39 to 8.1-40) and reviewed by the SMAQMD (FDOC, p. 19-20; 5/12 RT 309). For example, in this analysis, if the highest PM_{10} levels currently in this region occurred in the wintertime, and if the highest project impacts for PM_{10} were to occur in the summertime, the analysis would nonetheless assume that they occurred at the same time. Even with this level of conservatism CPP will not cause any new violations of any state or federal air quality standards. (SMUD Group 1 Testimony, Air Quality, p. 11; 3/13 RT 29; FDOC, p. 20.)

Given existing violations of the state and federal ozone standards, and of the state particulate matter or PM_{10} standard that occur from time to time, CPP would contribute to these existing violations. (SMUD Group 1 Testimony, Air Quality, p. 11; 3/13 RT 29.) Because of this contribution to those existing problems, air quality regulations require that CPP provide the second element of the regional air quality analysis, emissions offsets, as discussed in the next section below.

A protocol for a second cumulative air quality impact analysis was included in the Application for Certification (AFC, Appendix 8.1G). The SMAQMD confirmed there were no sources in the project area, which would have the potential to contribute to cumulative impacts, and hence this second analysis was not completed (Data Response 176, Attachment AQ-176a; FSA, p. 4.1-14).

In sum, the cumulative air quality impact analyses prepared for CPP reached the conclusion: that CPP will not cause any new violations of state or federal ambient air quality standards, and that CPP will contribute to existing violations of the state and federal standards for ozone, and the state standard for PM_{10} . (SMUD Group 1 Testimony, Air Quality, p. 11; 3/13 RT 29.) These potential cumulative, regional air quality impacts are addressed through the provision of emission reduction credits. (3/13 RT 31-32.)

2. CPP has Identified and Obtained Emission Reduction Credits to Fully Offset and Mitigate Any Potential Regional Air Quality Impact.

Emissions offsets are one of the most misunderstood aspects of the air quality regulatory program. Emission offsets are not intended to protect local air quality. (SMUD Group 1 Testimony, Air Quality, p. 18; 3/13 RT 31.) Instead, emission offsets are part of a regional mitigation program designed to ensure that new plants of any type can be constructed while still making sure that progress towards cleaner air is maintained. Emission offsets are not an option that can be elected by a project applicant to avoid any other requirements. Emission offsets are mandated by local regulations, state law and federal law. (AFC, p. 8.1-17; FSA, p. 4.1-2; FDOC, pp. 17-18.)

CPP has provided offsets for this project as required by the SMAQMD. Specifically, CPP has provided offsets for precursors of ozone, hydrocarbons and oxides of nitrogen, and for PM_{10}, in the quantities required by applicable law and regulation. (FDOC, Appendix B.)

The provision of these emission offsets fully mitigates the potential regional cumulative impacts associated with CPP. (SMUD Group 1 Testimony, Air Quality, pp.17-21; 3/13 RT 31-32.) Although the Staff originally expressed the opinion that these offsets were insufficient, at the March 13 hearing the Staff confirmed that the offsets provided by CPP were, in fact, sufficient to mitigate all significant air quality impacts from CPP. (Staff Supplemental Air Quality Testimony, March 12, 2003, p. 1.)

It is important to note that the significance of the project's air quality impacts, were expressly addressed by the SMAQMD in the FDOC. In particular, the SMAQMD concluded that:

> "Based on the air quality impact analysis and the health risk assessment, the maximum air quality impacts and toxic risk were determined to be less than significant." (FDOC, p. 24.)

APPENDIX B – CONDITION OF CERTIFICATION ROAD MAP

TABLE B-1
Condition of Certification Road Map

FSA Condition	Contested?	Proposed Changes by SMUD Found at:	CEC Response:	SMUD Counter-Proposal	Additional Response from either party	Resolution[1]
Air Quality						
AQ-SC1	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B		Resolved
AQ-SC2	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B		Resolved
AQ-SC3	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test. Para. a, n, p, q, r	3/24/03 Informal Response Set 14B	3/13/03 G. Rubenstein oral testimony p. 36-43	**Unresolved**
AQ-SC4	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B	3/13/03 M. Layton oral testimony p. 140-141	Resolved
AQ-SC5	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B		Resolved/ COC Deleted
AQ-SC6	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B		Resolved
AQ-SC7	Yes	New COC, not in FSA, could not respond on 3/3/03	3/12/03 Supplemental Test. Not in FSA	3/13/03 SMAQMD oral testimony p. 20 lines 18-25 3/24/03 Informal Response Set 14B	3/13/03 G. Rubenstein oral testimony pp. 45, 49-51, 114, 117, 118, 122,	**Unresolved**
AQ-SC8	Yes	New COC, not in FSA, could not respond on 3/3/03	3/12/03 Supplemental Test. Not in FSA	3/13/03 G. Rubenstein oral testimony 3/17/03 Informal Response Set 14 3/24/03 Informal Response Set 14B	3/13/03 G. Rubenstein oral testimony pp. 45-49	**Unresolved**
AQ-1	No (FSA)					Resolved
AQ-2	No (FSA)					Resolved
AQ-3	No (FSA)					Resolved

TABLE B-1
Condition of Certification Road Map

FSA Condition	Contested?	Proposed Changes by SMUD Found at:	CEC Response:	SMUD Counter-Proposal	Additional Response from either party	Resolution[1]
AQ-4	No (FSA)					Resolved
AQ-5	No (FSA)					Resolved
AQ-6	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B		Resolved
AQ-7	No (FSA)					Resolved
AQ-8	No (FSA)					Resolved
AQ-9	No (FSA)					Resolved
AQ-10	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B		Resolved
AQ-11	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B		Resolved
AQ-12	No (FSA)					Resolved
AQ-13	No (FSA)					Resolved
AQ-14	No (FSA)					Resolved
AQ-15	No (FSA)					Resolved
AQ-16	No (FSA)					Resolved
AQ-17	No (FSA)					Resolved
AQ-18	No (FSA)					Resolved
AQ-19	Clarification	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B		Resolved
AQ-20	No (FSA)					Resolved
AQ-21	No (FSA)					Resolved
AQ-22	No (FSA)					Resolved
AQ-23	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B		Resolved

TABLE B-1
Condition of Certification Road Map

FSA Condition	Contested?	Proposed Changes by SMUD Found at:	CEC Response:	SMUD Counter-Proposal	Additional Response from either party	Resolution[1]
AQ-24	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B		Resolved
AQ-25	No (FSA)					Resolved
AQ-26	No (FSA)					Resolved
AQ-27	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B		Resolved
AQ-28	No (FSA)					Resolved
AQ-29	No (FSA)					Resolved
AQ-30	No (FSA)					Resolved
AQ-31	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03 Informal Response Set 14B		Resolved
AQ-32	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Test.	3/24/03/Informal Response Set 14B	3/13/03 G. Rubenstein oral testimony p. 43-45	**Unresolved**
AQ-33	No (FSA)					Resolved
AQ-34	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Testimony	3/24/03/Informal Response Set 14B		Resolved
AQ-35	No (FSA)					Resolved
AQ-36	No (FSA)					Resolved
AQ-37	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Testimony	3/24/03/Informal Response Set 14B		Resolved
AQ-38	No (FSA)					Resolved
AQ-39	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Testimony	3/24/03/Informal Response Set 14B		Resolved
AQ-40	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Testimony	3/24/03/Informal Response Set 14B		Resolved
AQ-41	Yes	3/3/03 Group 1	3/12/03 Supplemental	3/24/03/Informal		Resolved

TABLE B-1
Condition of Certification Road Map

FSA Condition	Contested?	Proposed Changes by SMUD Found at:	CEC Response:	SMUD Counter-Proposal	Additional Response from either party	Resolution[1]
		Testimonies	Testimony	Response Set 14B		
AQ-42	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Testimony	3/24/03/Informal Response Set 14B	3/13/03 oral testimony M. Layton p. 141	Resolved
AQ-43	Yes	3/3/03 Group 1 Testimonies	3/12/03 Supplemental Testimony	3/24/03/Informal Response Set 14B	3/13/03 oral testimony M. Layton p. 141	Resolved
Biological Resources						
BIO-1 to BIO-21	No (FSA)					Resolved
BIO-22	No				Bank Ratios corrected in oral testimony by M. Dorin (5-12-03 RT; p. 245)	Resolved
Cultural Resources						
CUL-1	No		3/12/03 CEC Supp Testimony			Resolved
CUL-2	No		3/12/03 CEC Supp Testimony			Resolved
CUL-3	No		3/12/03 CEC Supp Testimony			Resolved
CUL-4	No (FSA)					Resolved
CUL-5	No		3/12/03 CEC Supp Testimony			Resolved
CUL-6	No		3/12/03 CEC Supp Testimony			Resolved
CUL-7	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
CUL-8	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
CUL-9	No		3/12/03 CEC Supp Testimony			Resolved
Hazardous Materials Management						
HAZ-1	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
HAZ-2	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved

TABLE B-1
Condition of Certification Road Map

FSA Condition	Contested?	Proposed Changes by SMUD Found at:	CEC Response:	SMUD Counter-Proposal	Additional Response from either party	Resolution[1]
HAZ-3	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
HAZ-4	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
HAZ-5	No		3/12/03 CEC Supp Testimony			Resolved
HAZ-6	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
HAZ-7	No		3/12/03 CEC Supp Testimony			Resolved
HAZ-8	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony		3/13/03 RT pp. 195-196	Resolved
Land Use – no COCs						
Noise and Vibration						
NOISE-1	No (FSA)					Resolved
NOISE-2	No (FSA)					Resolved
NOISE-3	No (FSA)					Resolved
NOISE-4	No (FSA)					Resolved
NOISE-5	No (FSA)					Resolved
NOISE-6	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
NOISE-7	No (FSA)					Resolved
NOISE-8	No (FSA)					Resolved
NOISE-9	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony		5/12/03 RT pp. 375-378	Resolved
NOISE-10	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			**Resolved/COC Deleted** (3/12/03 CEC Supp Testimony.)

TABLE B-1
Condition of Certification Road Map

FSA Condition	Contested?	Proposed Changes by SMUD Found at:	CEC Response:	SMUD Counter-Proposal	Additional Response from either party	Resolution[1]
NOISE-10 (Formerly NOISE-11)	Hearing Officer requested			3/14/03 RT pp. 117-118	5/9/03 COCs Discussed at March Hearings	Resolved. (5/12/03 RT; pp. 174-178)
Public Health						
PUBLIC HEALTH-1	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony.			Resolved
Socioeconomics – no COCs						
Traffic & Transportation						
TRANS -1	No (FSA)					Resolved
TRANS -2	No (FSA)					Resolved
TRANS -3	No (FSA)					Resolved
TRANS -4	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
TRANS -5	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony		5/9/03 COCs Discussed at March Hearings	Resolved
TRANS -6	No (FSA)					Resolved
TRANS -7	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
TRANS -8	No (FSA)					Resolved
TRANS -9	Hearing Officer requested				5/9/03 COCs Discussed at March Hearings	Resolved (5-12-03 RT; pp. 375-378)
TRANS -10	Hearing Officer requested				5/9/03 COCs Discussed at March Hearings	Resolved (5-12-03 RT; pp. 375-378)
T-Line Safety & Nuisance						
TLSN-1	No (FSA)					Resolved

TABLE B-1
Condition of Certification Road Map

FSA Condition	Contested?	Proposed Changes by SMUD Found at:	CEC Response:	SMUD Counter-Proposal	Additional Response from either party	Resolution[1]
TLSN-2	No (FSA)					Resolved
TLSN-3	No (FSA)					Resolved
TLSN-4	No (FSA)					Resolved
Visible Plumes						
PLUME-1	Yes	3/3/03 Group 1 Testimony	3/12/03 CEC Supp Testimony			Resolved
Visual Resources						
VIS-1	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
VIS-2	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
VIS-3	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
VIS-4	No (FSA)					Resolved
VIS-5	No (FSA)					Resolved
Waste Management						
WASTE-1	No (FSA)					Resolved
WASTE-2	No (FSA)					Resolved
WASTE-3	No (FSA)					Resolved
WASTE-4	No (FSA)					Resolved
WASTE-5	No (FSA)					Resolved
WASTE-6	No (FSA)					Resolved
WASTE-7	Hearing Officer requested			3-13-03 RT. pp. 296-302	5/9/03 COCs Discussed at March Hearings	Resolved (3-13-03 RT; pp. 296-302)

TABLE B-1
Condition of Certification Road Map

FSA Condition	Contested?	Proposed Changes by SMUD Found at:	CEC Response:	SMUD Counter-Proposal	Additional Response from either party	Resolution[1]
Worker Safety/Fire Protection						
WORKER SAFETY-1 to 2	No (FSA)					Resolved between Staff & SMUD. Additional information to be submitted by SMUD on 7/1/03 in accordance with Comm. Order Re: Fire Safety.
Facility Design						
GEN-1 to 8	No (FSA)					Resolved
CIVIL-1 to 4	No (FSA)					Resolved
STRUC-1 to 4	No (FSA)					Resolved
MECH-1 to 3	No (FSA)					Resolved
ELEC-1	No (FSA)					Resolved
Geology, Mineral Resources & Paleontology						
PAL-1	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
PAL-2	No		3/12/03 CEC Supp Testimony			Resolved
PAL-3	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
PAL-4	No		3/12/03 CEC Supp Testimony			Resolved
PAL-5	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
PAL-6	No (FSA)					Resolved

TABLE B-1
Condition of Certification Road Map

FSA Condition	Contested?	Proposed Changes by SMUD Found at:	CEC Response:	SMUD Counter-Proposal	Additional Response from either party	Resolution[1]
PAL-7	Yes	2/19/03 PHC	3/12/03 CEC Supp Testimony			Resolved
Power Plant Efficiency – No COCs						
Transmission System Engineering						
TSE-1 to 4	No (FSA)					Resolved
General Conditions						
COM-1	No (FSA)					Resolved
COM-2	No (FSA)					Resolved
COM-3	No (FSA)					Resolved
COM-4	No (FSA)					Resolved
COM-5	No (FSA)					Resolved
COM-6	No (FSA)					Resolved
COM-7	No (FSA)					Resolved
COM-8	Yes	3/3/03 Group 1 Testimony	3/12/03 CEC Supp Testimony			Resolved
COM-9	No (FSA)					Resolved
COM-10	No (FSA)					Resolved
COM-11	No (FSA)					Resolved
COM-12	No (FSA)					Resolved
COM-13	No (FSA)					Resolved
COM-14	No (FSA)					Resolved

TABLE B-1
Condition of Certification Road Map

FSA Condition	Contested?	Proposed Changes by SMUD Found at:	CEC Response:	SMUD Counter-Proposal	Additional Response from either party	Resolution[1]

NOTES:
PHC = SMUD's Prehearing Conference Statement
RT = Reporter's Transcript

No (FSA) = Latest Version of COC Contained in the FSA.

[1] See CEC Staff's "All Conditions" memo, May 30, 2003